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Geotechnical
Environmental and
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September 21, 2006
Project 04516-2

Ms. Irene M. Dale
Environmental Engineer
Bureau of Waste Site Cleanup
Department of Environmental Protection
205B Lowell Street
Wilmington, MA 01887

Dear Ms. Dale:

Re: Immediate Response Action Plan Modification No. 2
50 Tufts Street
Somerville, Massachusetts
RTN 3-23246

REF
354
353
GEI

On behalf of UniFirst Corporation of Wilmington, Massachusetts, we prepared this Immediate Response Action (IRA) Plan Modification No. 2 for a release of chlorinated volatile organic compounds (VOCs) at 50 Tufts Street in Somerville, Massachusetts (the Property). Based on the results of assessments conducted to date, the disposal site is comprised of the Property and portions of properties located east of the Property across Tufts Street. Chlorinated VOCs, particularly tetrachloroethylene (also called perchloroethylene [PCE]), have been measured in soil, groundwater, and indoor air at the site. The Property is located in a residential and commercial neighborhood in East Somerville. The site location is shown on Fig. 1 and a Site Plan on Fig. 2.

The IRA Plan was originally submitted to DEP on January 9, 2006 and subsequently modified on June 27, 2006.

The original IRA Transmittal Form (BWSC-105) is attached and a copy is included in Attachment A.

1. CONTACT INFORMATION

Entity Undertaking the IRA
Brian Keegan
Senior Engineering Manager
UniFirst Corporation
68 Jonspin Road
Wilmington, MA 01887
978.658.8888 ext 645

Licensed Site Professional
Ileen S. Gladstone, P.E., LSP
Vice President
GEI Consultants, Inc.
1021 Main Street
Winchester, MA 01890
781.721.4012
LSP License: 9719

2. BACKGROUND

2.1 Release Description

The Property is approximately 51,111 square feet and developed with an approximately 20,594-square-foot, one-story masonry block building. The majority of the Property building is warehouse space and a small portion is office space. The building was constructed in two phases. The northern portion was constructed in about 1955 and was approximately 8,400 square feet. An approximately 12,200-square-foot addition was constructed in 1977. From the mid-1950s through 2002, several different business entities distributed laundry and dry cleaning supplies at the Property.

VOCs, particularly PCE, have been measured in soil, groundwater, and indoor air at the site. The source of the chlorinated VOCs is likely associated with the historic handling, storage, and distribution of laundry and dry cleaning chemicals at the Property. The highest concentrations of chlorinated solvents in groundwater were measured in samples collected from a well at the northwestern corner of the Property building. The highest concentrations of chlorinated VOCs in soil were detected in samples collected from two borings advanced within the building footprint on the western side of the building on the Property. VOCs were measured in an indoor air sample collected in the Property building.

Chlorinated VOCs have been detected in groundwater samples collected from monitoring wells located east of the Property across Tufts Street. In 2005, DEP conducted indoor air testing for PCE and other VOCs in a number of homes located on Tufts Street.

The Massachusetts Department of Environmental Protection (DEP) assigned Release Tracking Numbers (RTNs) 3-23246, 3-24358, and 3-24376 to reported releases associated with the site. The site is currently classified Tier IC. The RTNs for the site were consolidated under RTN 3-23246 at the time the Tier IC permit application was submitted to DEP on June 16, 2006.

2.2 Indoor Air Testing

Chlorinated VOCs have been detected in groundwater samples collected from monitoring wells located east of the Property across Tufts Street. In 2005, DEP conducted indoor air testing for PCE and other VOCs at 9, 11/13, 17, 19, 23, 25 and 27 Tufts Street, residences located across from 50 Tufts Street. DEP sent a letter to each homeowner summarizing the results of its testing and reported that the PCE detected during the indoor air testing was below DEP's "threshold limit" for "significant risk of harm to health over a short period of time" and "below the levels DEP typically finds in homes."

UniFirst initiated a quarterly indoor air monitoring program at the same homes along Tufts Street in March 2006, and collected a second round of indoor air samples in June 2006. In June 2006, GEI attempted to obtain access to collect indoor air samples from the basement and first floor living areas of the residences at 9, 11/13, 17, 19, 23, 25 and 27 Tufts Street. GEI collected samples on June 28 and 29, 2006 at 11/13, 19, 23 and 27 Tufts Street; however, we were unable to obtain access at that time to 9, 17 and 25 Tufts Street. We subsequently sampled 9 Tufts Street on July 24, 2006, and 25 Tufts Street on August 1, 2006. After numerous attempts to contact the residents at 17 Tufts Street, we were unable to obtain access to that residence during the 2006 second quarter sampling round.

Higher concentrations of PCE in indoor air were detected in the first floors at 11/13, 19, 23, and 27 Tufts Street and in the basements at 11/13, 23 and 27 Tufts Street in the June 2006 samples than those detected in March 2006. At 11/13 and 19 Tufts Street, the differences in concentrations from March 2006 to June 2006 were not substantial. However, PCE concentrations in the basement samples of 23 and 27 Tufts Street and the first floor sample at 23 Tufts Street were significantly higher than previously measured. GEI collected indoor air samples at 23 and 27 Tufts Street on August 3, 2006 to confirm the June test results. PCE concentrations detected in samples collected from 23 and 27 Tufts Street in August 2006 were significantly lower than those detected in samples collected in June 2006.

A summary of the indoor air testing results to date are in Table 1.

3. IRA OBJECTIVES, PLAN, AND SCHEDULE (310 CMR 40.0424[1][e])

3.1 IRA Objectives

The objectives of the IRA Modification are to:

- Install an air purifier in each of the seven residences evaluated along Tufts Street as a temporary mitigative action while additional investigation proceeds.

3.2 Planned IRA Activities

UniFirst will offer to each of the owners of the properties at 9, 11/13, 17, 19, 23, 25 and 27 Tufts Street to install a carbon filter air purifier unit, at no cost to the owners, as a temporary mitigative action while additional investigations proceed. GEI will be conducting indoor air sampling in each home in the later part of September or early October 2006. Following the indoor air sampling, we will install the air purifier unit in each basement in which the homeowner has agreed to its installation.

We propose to install an AllerAir 5000 Vocab air purifier. The 5000 Vocab is designed for the removal of VOCs. Excerpts from the manufacturer's literature describing the 5000 Vocab is in Attachment B.

4. REMEDIATION WASTE MANAGEMENT

The 5000 Vocab includes two types of filters (particulate and activated carbon) that require periodic replacement. The particulate pre-filter will need changing approximately quarterly, while the carbon filters will need changing on an approximately annual basis. The carbon filters that adsorb VOCs will be managed as remediation waste. The cost for filter replacement and disposal will be borne by UniFirst while these air purifiers are being used as a temporary mitigative measure.

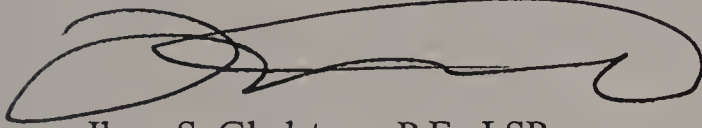
5. ENVIRONMENTAL MONITORING PLAN AND PERMITS

The fourth round of indoor air sampling, currently scheduled for December 2006, will be performed to confirm operation of the 5000 Vocab. No permits are required to conduct the proposed modifications to the IRA Plan.

Please contact me at 781.721.4012 or igladstone@geiconsultants.com if you have any questions.

Sincerely,

GEI CONSULTANTS, INC.



Ileen S. Gladstone, P.E., LSP
Vice President

MCE/ISG:rr
Attachments

N:\04516\Final\04516\IRA\IRA Plan Mod#2\IRA Mod #2.DOC

c: Brian Keegan, UniFirst Corporation
Stephen Aquilino, UniFirst Corporation
Vithal Deshpande, City of Somerville



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Table 1

Chemical Testing Results - Indoor Air Samples

50 Tufts Street
Somerville, MA

Sample Location:			11 Tufts St., basement				11 Tufts St., 1st floor			
Analyte	Method	DEP Background Concentrations in Indoor Air ug/m ³	IA-2		IA-2D (duplicate)		045160-11/13 Tufts-B		045160-11/13 Tufts-B	
			2/23/05		2/23/05		3/24/06		3/24/06	
			Shaw Environmental		Shaw Environmental		Shaw Environmental		Shaw Environmental	
			ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV
Volatile Organic Compounds (VOCs)	TO-15									
Carbon tetrachloride		1	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
Chloroform		3	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20
Chloromethane		NS	0.81	0.39	0.74	0.36	1.4 L	0.68 L	1.4 L	0.7 L
1,2-Dichloroethane		NS	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Methylene chloride		10	1.0	0.29	0.90	0.26	< 4.5 M	< 1.3 M	< 1.2 M	< 0.34 M
Tetrachloroethylene (PCE)		11	1.8	0.26	1.9	0.28	< 1.4	< 0.20	< 1.4	< 0.20
1,1,1-Trichloroethane		30	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		5	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location:			17 Tufts St., basement				17 Tufts St., 1st floor						
Analyte	Method	DEP Background Concentrations in Indoor Air		Sample Name:									
		ug/m ³	ppbV	IA-11		045160-17 Tufts-B		IA-12					
				3/24/05		3/24/06		3/24/06					
				Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.					
				ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV				
				Shaw Environmental		GEI Consultants, Inc.		Shaw Environmental					
Units:		ug/m ³		ppbV		ug/m ³		ppbV					
Volatile Organic Compounds (VOCs)		TO-15		0.16		< 1.3		< 0.20		< 1.3		< 0.20	
Carbon tetrachloride		1		< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20		
Chloroform		3		1.1	0.23	< 0.98	< 0.20	1.9	0.39	< 0.98	< 0.20		
Chloromethane		NS		0.97	0.47	1.2 L	0.58 L	1.1	0.52	1.7 L	0.8 L		
1,2-Dichloroethane		NS		< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20		
Methylene chloride		10		1.5	0.43	59.1 L	17 L	1.0	0.3	< 4.2 M	< 1.2 M		
Tetrachloroethylene (PCE)		11		8.8	1.3	1.3 J	0.19 J	4.7	0.69	2.9	0.43		
1,1,1-Trichloroethane		30		< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20		
Trichloroethylene (TCE)		5		0.91 J	0.17 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20		

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. *L* = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
- L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location:			23 Tufts St., basement				23 Tufts St., 1st floor								
Analyte	Method	DEP Background Concentrations in Indoor Air		IA-8		045160-23 Tufts-B		045160-23 Tufts-B		IA-7		045160-23 Tufts-1		045160-23 Tufts-1	
		ug/m ³		ppbV		3/24/06		8/3/06		2/23/05		3/24/06		6/28/06	
		ppbV		ug/m ³		ppbV		ug/m ³		ppbV		ug/m ³		ppbV	
		Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.		GEI Consultants, Inc.		Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.	
		Collected By:		2/23/05		3/24/06		8/3/06		2/23/05		3/24/06		6/28/06	
Sample Name:		2/23/05		3/24/06		8/3/06		2/23/05		3/24/06		6/28/06		8/3/06	
Sample Date:		2/23/05		3/24/06		8/3/06		2/23/05		3/24/06		6/28/06		8/3/06	
Collected By:		Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.		GEI Consultants, Inc.		Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.	
Units:		ug/m ³		ppbV		ug/m ³		ppbV		ug/m ³		ppbV		ug/m ³	
ppbV		ug/m ³		ppbV		ug/m ³		ppbV		ug/m ³		ppbV		ug/m ³	
Volatile Organic Compounds (VOCs)	TO-15	1	0.16	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	0.94 J	0.15 J	0.11 J
Carbon tetrachloride		3	0.6	0.88 J	< 0.20	< 0.20	3.7	0.76	NT	NT	0.63 J	< 0.20	13	2.7	NT
Chloroform		NS	NS	1.1	0.54	0.79 L	1.9	0.91	NT	NT	0.47	1.7 L	1.6	0.78	NT
Chloromethane		NS	NS	< 0.81	< 0.20	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.20
1,2-Dichloroethane		10	2.83	0.49 J	0.14 J	< 0.57 M	< 2.4 M	< 0.7 M	NT	NT	0.15 J	< 0.77 M	396 L	114 L	NT
Methylene chloride		11	1.6	2.3	0.34	0.42	125	18.5	10	1.5	1.6	< 1.4	94.9	14.0	1.4
Tetrachloroethylene (PCE)		30	5.41	< 1.1	< 0.20	< 1.1	1.5	0.28	0.60 J	0.11 J	< 1.1	< 0.20	1.0 J	0.19 J	< 0.20
1,1,1-Trichloroethane		5	0.92	< 1.1	< 0.20	< 1.1	1.0 J	0.19 J	< 1.1	< 0.20	< 1.1	< 0.20	0.64 J	0.12 J	< 0.20
Trichloroethylene (TCE)															

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
2. ug/m³ = micrograms per cubic meter.
3. ppbV = parts per billion by volume.
4. DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table," dated August 2002.
5. NS = No DEP Background Concentration has been established for this compound.
6. "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
7. Results in bold exceed the DEP Background Concentration in Indoor Air.

Qualifying Notes:

- J The reported result is below the laboratory reporting limit and is estimated.
L The reported result is estimated because the calculated relative percent difference (RPD) between a sample and the matrix duplicate was above the quality control limit specified in the Quality Assurance Project Plan (QAPP).
M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location:			25 Tufts St., basement				25 Tufts St., 1st floor				
Analyte	Method	DEP Background Concentrations in Indoor Air		Sample Name:				Sample Date:			
		ug/m ³	ppbV	IA-4		045160-25 Tufts-B		IA-3		045160-25 Tufts-1	
				ug/m ³	ppbV	Shaw Environmental	GEI Consultants, Inc.	2/23/05	3/23/06	2/23/05	3/23/06
Volatlie Organic Compounds (VOCs)	TO-15										
Carbon tetrachloride		1	0.16	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20
Chloroform		3	0.6	< 0.98	< 0.20	NT	NT	< 0.98	< 0.20	NT	NT
Chloromethane		NS	NS	0.74	0.36	1.1 L	0.52 L	1.1 L	0.54 L	NT	NT
1,2-Dichloroethane		NS	NS	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
Methylene chloride		10	2.83	0.49 J	0.14 J	< 1.6 M	< 0.47 M	NT	< 0.54 M	NT	NT
Tetrachloroethylene (PCE)		11	1.6	1.6	0.23	3.2	0.47	3.9	0.25	2	0.29
1,1,1-Trichloroethane		30	5.41	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
Trichloroethylene (TCE)		5	0.92	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

General Notes:

- Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
- ug/m³ = micrograms per cubic meter.
- ppbV = parts per billion by volume.
- DEP Background Concentrations obtained from MADEP BWSC NERO Memorandum "Latest Revision of the Indoor Air Contaminants Comparison Table" dated August 2002.
- NS = No DEP Background Concentration has been established for this compound.
- "<" = The analyte was not detected at a concentration above the specified laboratory reporting limit.
- Results in bold exceed the DEP Background Concentration in Indoor Air.

Qualifying Notes:

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- M The reporting limit is elevated due to a detection of the analyte in a method blank sample, trip blank sample, or both.

Table 1
Chemical Testing Results - Indoor Air Samples
50 Tufts Street
Somerville, MA

Sample Location:				27 Tufts St., basement						27 Tufts St., 1st floor							
				IA-10		045160-27 Tufts-B		045160-27 Tufts-B		045160-27 Tufts-B		IA-9		045160-27 Tufts-1		045160-27 Tufts-1	
Sample Name: Sample Date: Collected By:				2/23/05		3/23/06		6/28/06		8/3/06		2/23/05		3/23/06		6/28/06	
				Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.		GEI Consultants, Inc.		Shaw Environmental		GEI Consultants, Inc.		GEI Consultants, Inc.	
Units:				ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV	ug/m ³	ppbV
DEP Background Concentrations in Indoor Air				ppbV													
Method				TO-15													
Analyte																	
Volatile Organic Compounds (VOCs) Carbon tetrachloride Chloroform Chloromethane 1,2-Dichloroethane Methylene chloride Tetrachloroethylene (PCE) 1,1,1-Trichloroethane Trichloroethylene (TCE)		1	0.16	< 1.3	< 0.20	< 1.3	< 0.20	0.69 J	0.11 J	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.20	< 1.3	< 0.2
		3	0.6	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	< 0.98	< 0.20	NT	NT
		NS	NS	0.6	0.29	2.9 L	1.4 L	1.3	0.65	1.2	0.59	110 L	53.5 L	1.6	0.79	NT	NT
		NS	NS	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20	< 0.81	< 0.20
		10	2.83	0.49 J	0.14 J	< 4.2 M	< 1.2 M	< 2.1 M	< 0.6 M	0.52 J	0.15 J	< 2.0 M	< 0.59 M	< 2.2 M	< 0.63 M	NT	NT
		11	1.6	< 1.4	< 0.20	< 1.4	< 0.20	117	17.3	< 1.4	< 0.20	< 1.4	< 0.20	3.8	0.56	0.81 J	0.12 J
		30	5.41	< 1.1	< 0.20	< 1.1	< 0.20	1.0 J	0.19 J	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20
		5	0.92	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20	< 1.1	< 0.20

General Notes:

1. Analytes detected in at least one sample are reported here. For a complete list of analytes see the laboratory data sheets.
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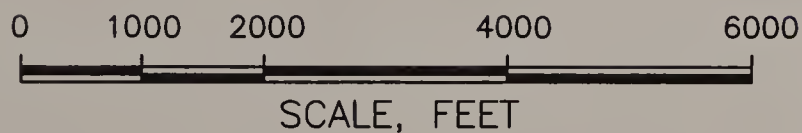
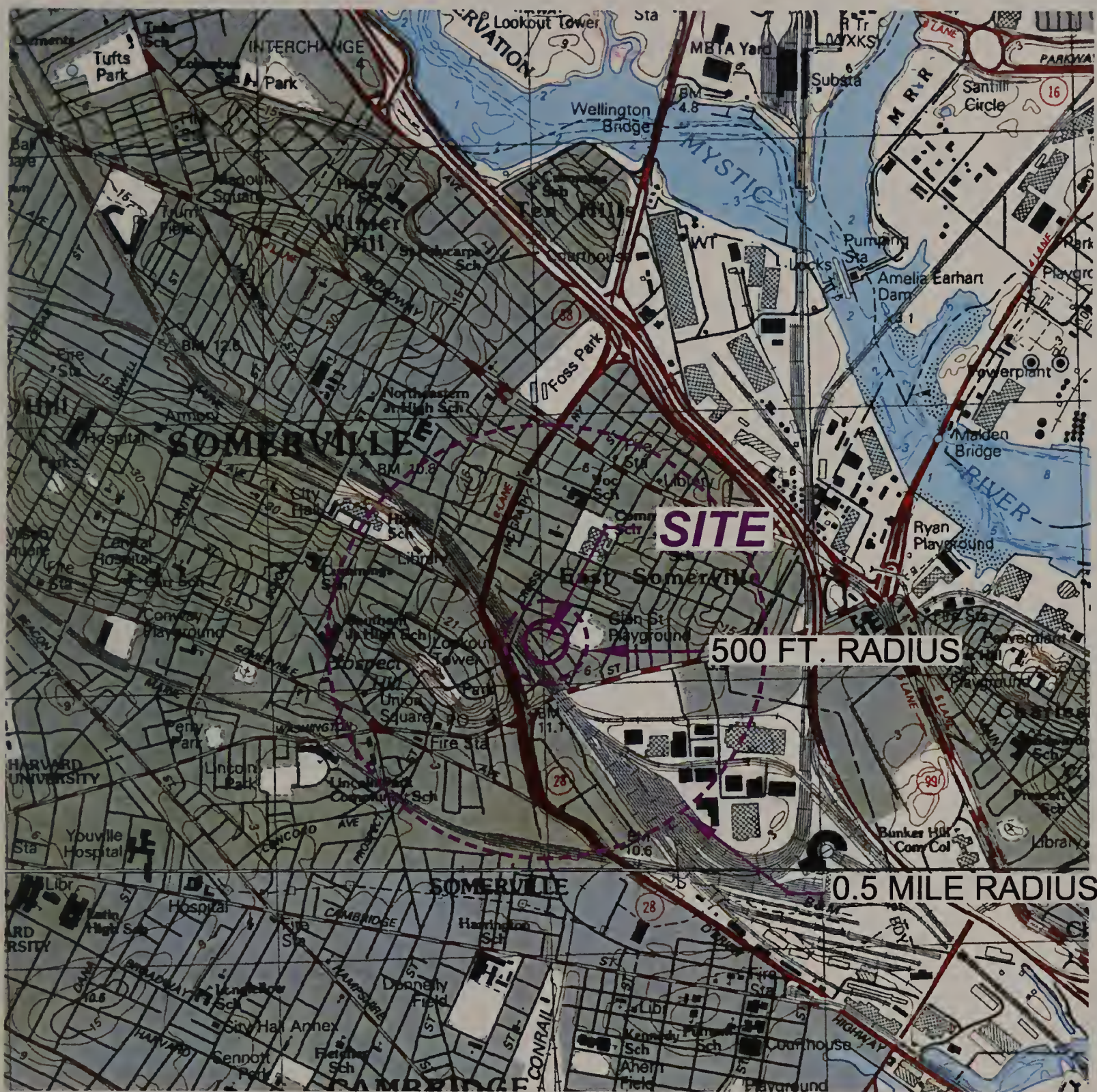
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This Image provided by MassGIS is taken from
U.S.G.S. Topographic 7.5 X 15 Minute Series
Boston North, MA Quadrangle, 1985.
Datum is National Geodetic Vertical Datum (NGVD).
Contour Interval is 3 Meters.

50 Tufts Street
Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts

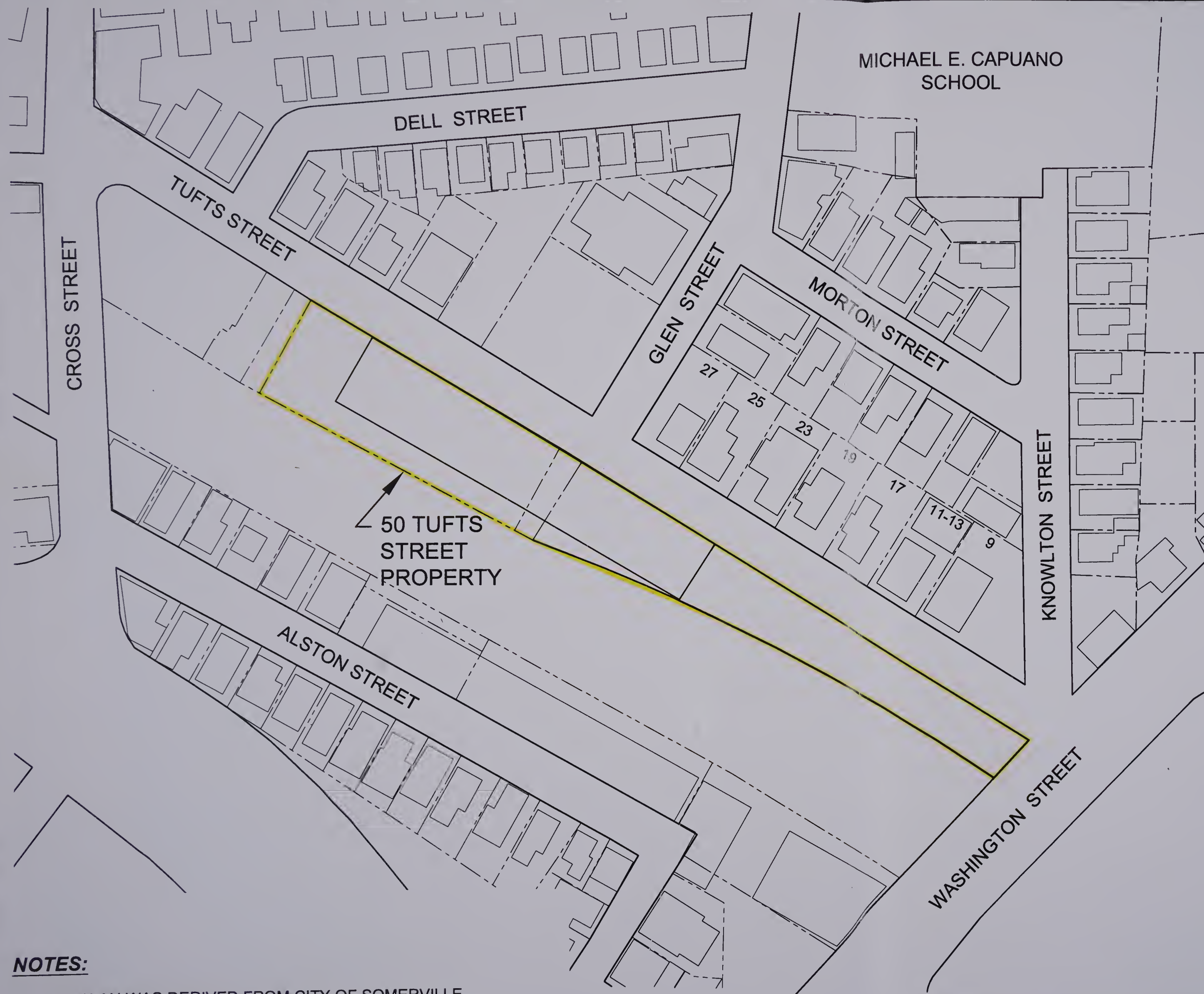


Project 04516-2

SITE LOCATION MAP

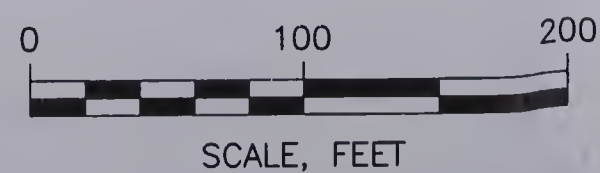
September 2006

Fig. 1



NOTES:

1. THIS PLAN WAS DERIVED FROM CITY OF SOMERVILLE ASSESSORS MAP NO. 93 AND 104, DATED JANUARY 3, 2001.



50 Tufts Street
Somerville, Massachusetts

UniFirst Corporation
Wilmington, Massachusetts



SITE PLAN

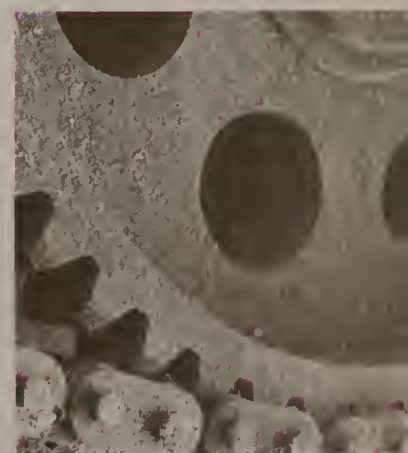
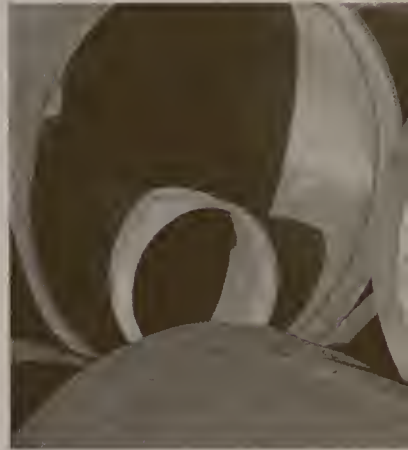
Project 04516-2

September 2006

Fig. 2



Geotechnical
Environmental and
Water Resources
Engineering



ATTACHMENT A

Immediate Response Action (IRA) Transmittal Form
(BWSC-105)



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM**

Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3

-

23246

A. RELEASE OR THREAT OF RELEASE LOCATION:

1. Release Name/Location Aid: _____
2. Street Address: 50 Tufts Street
3. City/Town: Somerville 4. ZIP Code: 02145
5. UTM Coordinates: a. UTM N: 4,694,322 b. UTM E: 328,049
- ☐ 6. Check here if a Tier Classification Submittal has been provided to DEP for this disposal site.
☐ a. Tier IA ☐ b. Tier IB ☒ c. Tier IC ☐ d. Tier II
- ☐ 7. Check here if this location is Adequately Regulated, pursuant to 310 CMR 40.0110-0114. Specify Program (check one):
☐ a. CERCLA ☐ b. HSWA Corrective Action ☐ c. Solid Waste Management
☐ d. RCRA State Program (21C Facilities)

B. THIS FORM IS BEING USED TO: (check all that apply)

1. List Submittal Date of Initial IRA Written Plan (if previously submitted): _____
(mm/dd/yyyy)
- ☐ 2. Submit an Initial IRA Plan.
- ☒ 3. Submit a **Modified IRA Plan** of a previously submitted written IRA Plan.
- ☐ 4. Submit an **Imminent Hazard Evaluation**. (check one)
☐ a. An Imminent Hazard exists in connection with this Release or Threat of Release.
☐ b. An Imminent Hazard does not exist in connection with this Release or Threat of Release.
☐ c. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release, and further assessment activities will be undertaken.
☐ d. It is unknown whether an Imminent Hazard exists in connection with this Release or Threat of Release. However, response actions will address those conditions that could pose an Imminent Hazard.
- ☐ 5. Submit a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard**.
- ☐ 6. Submit an **IRA Status Report**.
- ☐ 7. Submit a **Remedial Monitoring Report**. (This report can only be submitted through eDEP.)
a. Type of Report: (check one) ☐ i. Initial Report ☐ ii. Interim Report ☐ iii. Final Report
b. Frequency of Submittal: (check all that apply)
☐ i. A Remedial Monitoring Report(s) submitted monthly to address an Imminent Hazard.
☐ ii. A Remedial Monitoring Report(s) submitted monthly to address a Condition of Substantial Release Migration.
☐ iii. A Remedial Monitoring Report(s) submitted concurrent with a IRA Status Report.
c. Number of Remedial Systems and/or Monitoring Programs: _____

A separate BWSC105A, IRA Remedial Monitoring Report, must be filled out for each Remedial System and/or Monitoring Program addressed by this transmittal form.



**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
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B. THIS FORM IS BEING USED TO (cont.): (check all that apply)

☐ 8. Submit an **IRA Completion Statement**.

☐ a. Check here if future response actions addressing this Release or Threat of Release notification condition will be conducted as part of the Response Actions planned or ongoing at a Site that has already been Tier Classified under a different Release Tracking Number (RTN) . When linking RTNs, rescoring via the NRS is required if there is a reasonable likelihood that the addition of the new RTN(s) would change the classification of the site.

b. Provide Release Tracking Number of Tier Classified Site (Primary RTN):

-

These additional response actions must occur according to the deadlines applicable to the Primary RTN. Use the Primary RTN when making all future submittals for the site unless specifically relating to this Immediate Response Action.

☐ 9. Submit a **Revised IRA Completion Statement**.

(All sections of this transmittal form must be filled out unless otherwise noted above)

C. RELEASE OR THREAT OF RELEASE CONDITIONS THAT WARRANT IRA:

1. Identify Media Impacted and Receptors Affected: (check all that apply)

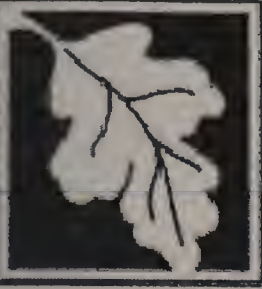
- ☒ a. Air ☒ b. Basement ☒ c. Critical Exposure Pathway ☒ d. Groundwater ☒ e. Residence
☐ f. Paved Surface ☐ g. Private Well ☐ h. Public Water Supply ☐ i. School ☐ j. Sediments
☐ k. Soil ☐ l. Storm Drain ☐ m. Surface Water ☐ n. Unknown ☐ o. Wetland ☐ p. Zone 2
☐ q. Others Specify: _____

2. Identify Oils and Hazardous Materials Released: (check all that apply)

- ☐ a. Oils ☒ b. Chlorinated Solvents ☐ c. Heavy Metals
☐ d. Others Specify: _____

D. DESCRIPTION OF RESPONSE ACTIONS: (check all that apply, for volumes list cumulative amounts)

- | | |
|--|---|
| <input type="checkbox"/> 1. Assessment and/or Monitoring Only | <input type="checkbox"/> 2. Temporary Covers or Caps |
| <input type="checkbox"/> 3. Deployment of Absorbent or Containment Materials | <input type="checkbox"/> 4. Temporary Water Supplies |
| <input type="checkbox"/> 5. Structure Venting System | <input type="checkbox"/> 6. Temporary Evacuation or Relocation of Residents |
| <input type="checkbox"/> 7. Product or NAPL Recovery | <input type="checkbox"/> 8. Fencing and Sign Posting |
| <input type="checkbox"/> 9. Groundwater Treatment Systems | <input type="checkbox"/> 10. Soil Vapor Extraction |
| <input type="checkbox"/> 11. Bioremediation | <input type="checkbox"/> 12. Air Sparging |



Massachusetts Department of Environmental Protection
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FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

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D. DESCRIPTION OF RESPONSE ACTIONS (cont.): (check all that apply, for volumes list cumulative amounts)

☐ 13. Excavation of Contaminated Soils

☐ a. Re-use, Recycling or Treatment

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

iii. Describe: _____

☐ b. Store

☐ i. On Site Estimated volume in cubic yards _____

☐ ii. Off Site Estimated volume in cubic yards _____

ii.a. Receiving Facility: _____ Town: _____ State: _____

ii.b. Receiving Facility: _____ Town: _____ State: _____

☐ c. Landfill

☐ i. Cover Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ ii. Disposal Estimated volume in cubic yards _____

Receiving Facility: _____ Town: _____ State: _____

☐ 14. Removal of Drums, Tanks or Containers:

a. Describe Quantity and Amount: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☐ 15. Removal of Other Contaminated Media:

a. Specify Type and Volume: _____

b. Receiving Facility: _____ Town: _____ State: _____

c. Receiving Facility: _____ Town: _____ State: _____

☒ 16. Other Response Actions:

Describe: IRA Plan modification to include offering the installation of carbon air purifiers at 7 residences along
Tufts Street (described in the attached IRA Plan Modification letter).

☐ 17. Use of Innovative Technologies:

Describe: _____



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Release Tracking Number

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23246

E. LSP SIGNATURE AND STAMP:

I attest under the pains and penalties of perjury that I have personally examined and am familiar with this transmittal form, including any and all documents accompanying this submittal. In my professional opinion and judgment based upon application of (i) the standard of care in 309 CMR 4.02(1), (ii) the applicable provisions of 309 CMR 4.02(2) and (3), and 309 CMR 4.03(2), and (iii) the provisions of 309 CMR 4.03(3), to the best of my knowledge, information and belief,

> if Section B of this form indicates that an **Immediate Response Action Plan** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) complies(y) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Imminent Hazard Evaluation** is being submitted, this Imminent Hazard Evaluation was developed in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, and the assessment activity(ies) undertaken to support this Imminent Hazard Evaluation comply(ies) with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000;

> if Section B of this form indicates that an **Immediate Response Action Status Report** and/or a **Remedial Monitoring Report** is(are) being submitted, the response action(s) that is (are) the subject of this submittal (i) is (are) being implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is (are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal;

> if Section B of this form indicates that an **Immediate Response Action Completion Statement** or a request to **Terminate an Active Remedial System or Response Action(s) Taken to Address an Imminent Hazard** is being submitted, the response action(s) that is(are) the subject of this submittal (i) has (have) been developed and implemented in accordance with the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000, (ii) is(are) appropriate and reasonable to accomplish the purposes of such response action(s) as set forth in the applicable provisions of M.G.L. c. 21E and 310 CMR 40.0000 and (iii) comply(ies) with the identified provisions of all orders, permits, and approvals identified in this submittal.

I am aware that significant penalties may result, including, but not limited to, possible fines and imprisonment, if I submit information which I know to be false, inaccurate or materially incomplete.

1. LSP #: 9719

2. First Name: Ileen S.

3. Last Name: Gladstone

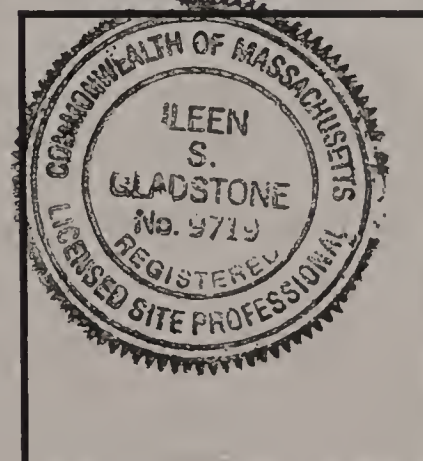
4. Telephone: (781) 721-4012

5. Ext.: 6. FAX: (781) 721-4073

7. Signature:

8. Date: 9/21/06
(mm/dd/yyyy)

9. LSP Stamp:





Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

**IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM** Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

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F. PERSON UNDERTAKING IRA:

1. Check all that apply: ☐ a. change in contact name ☐ b. change of address ☐ c. change in the person undertaking response actions

2. Name of Organization: UniFirst Corporation

3. Contact First Name: Brian 4. Last Name: Keegan

5. Street: 68 Jonspin Road 6. Title: Senior Engineering Manager

7. City/Town: Wilmington 8. State: MA 9. ZIP Code: 01887

10. Telephone: (978) 658-8888 11. Ext.: 645 12. FAX: _____

G. RELATIONSHIP TO RELEASE OR THREAT OF RELEASE OF PERSON UNDERTAKING IRA:

☒ 1. RP or PRP ☐ a. Owner ☐ b. Operator ☐ c. Generator ☐ d. Transporter
☒ e. Other RP or PRP Specify: corporate affiliation with previous owner of property

☐ 2. Fiduciary, Secured Lender or Municipality with Exempt Status (as defined by M.G.L. c. 21E, s. 2)

☐ 3. Agency or Public Utility on a Right of Way (as defined by M.G.L. c. 21E, s. 5(j))

☐ 4. Any Other Person Undertaking IRA Specify Relationship: _____

H. REQUIRED ATTACHMENT AND SUBMITTALS:

☐ 1. Check here if any Remediation Waste, generated as a result of this IRA, will be stored, treated, managed, recycled or reused at the site following submission of the IRA Completion Statement. If this box is checked, you must submit one of the following plans, along with the appropriate transmittal form.

☐ a. A Release Abatement Measure (RAM) Plan (BWSC106) ☐ b. Phase IV Remedy Implementation Plan (BWSC108)

☐ 2. Check here if the Response Action(s) on which this opinion is based, if any, are (were) subject to any order(s), permit(s) and/or approval(s) issued by DEP or EPA. If the box is checked, you MUST attach a statement identifying the applicable provisions thereof.

☐ 3. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the implementation of an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.

☐ 4. Check here to certify that the Chief Municipal Officer and the Local Board of Health were notified of the submittal of a Completion Statement for an Immediate Response Action taken to control, prevent, abate or eliminate an Imminent Hazard.

☐ 5. Check here if any non-updatable information provided on this form is incorrect, e.g. Release Address/Location Aid. Send corrections to the DEP Regional Office.

☒ 6. Check here to certify that the LSP Opinion containing the material facts, data, and other information is attached.



Massachusetts Department of Environmental Protection
Bureau of Waste Site Cleanup

BWSC105

IMMEDIATE RESPONSE ACTION (IRA) TRANSMITTAL
FORM Pursuant to 310 CMR 40.0424 - 40.0427 (Subpart D)

Release Tracking Number

3 - 23246

I. CERTIFICATION OF PERSON UNDERTAKING IRA:

1. I, Brian Keegan, attest under the pains and penalties of perjury (i) that I have personally examined and am familiar with the information contained in this submittal, including any and all documents accompanying this transmittal form, (ii) that, based on my inquiry of those individuals immediately responsible for obtaining the information, the material information contained in this submittal is, to the best of my knowledge and belief, true, accurate and complete, and (iii) that I am fully authorized to make this attestation on behalf of the entity legally responsible for this submittal. I/the person or entity on whose behalf this submittal is made am/is aware that there are significant penalties, including, but not limited to, possible fines and imprisonment, for willfully submitting false, inaccurate, or incomplete information.

2. By: Brian E. Keegan Signature 3. Title: Senior Engineering Manager

4. For: UniFirst Corporation 5. Date: 09/15/06
(Name of person or entity recorded in Section F) (mm/dd/yyyy)

☐ 6. Check here if the address of the person providing certification is different from address recorded in Section F.

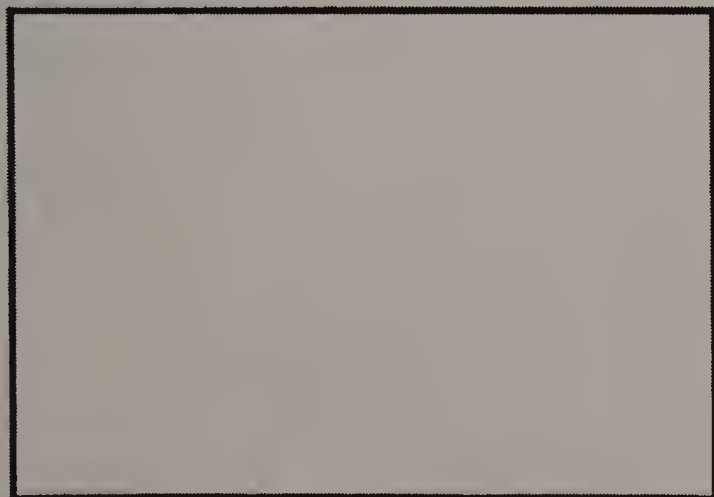
7. Street: _____

8. City/Town: _____ 9. State: _____ 10. ZIP Code: _____

11. Telephone: _____ 12. Ext.: _____ 13. FAX: _____

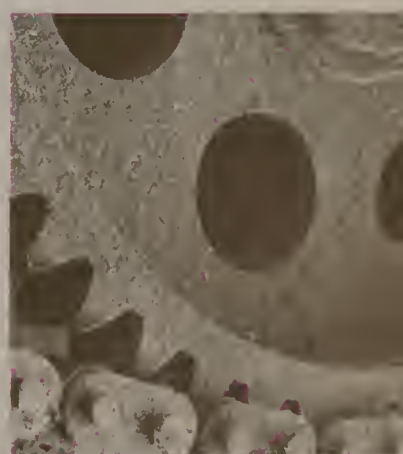
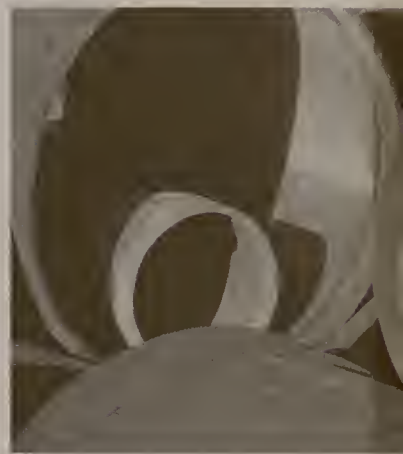
YOU ARE SUBJECT TO AN ANNUAL COMPLIANCE ASSURANCE FEE OF UP TO \$10,000 PER BILLABLE YEAR FOR THIS DISPOSAL SITE. YOU MUST LEGIBLY COMPLETE ALL RELEVANT SECTIONS OF THIS FORM OR DEP MAY RETURN THE DOCUMENT AS INCOMPLETE. IF YOU SUBMIT AN INCOMPLETE FORM, YOU MAY BE PENALIZED FOR MISSING A REQUIRED DEADLINE.

Date Stamp (DEP USE ONLY:)





Geotechnical
Environmental and
Water Resources
Engineering



ATTACHMENT B

Air Purifier Manufacturer's Literature
(AllerAir 5000 Vocab)



5000 Vocab

Specially designed for airborne chemical and odor problems

Impregnated activated carbon bed alleviates environments with Volatile Organic Compounds (VOC)



Volatile Organic Compounds are chemicals released by many household products. Our 5000 Vocab model includes special features to trap these VOCs.

Any of 40 specially-blended carbon beds

- 18 lbs of activated carbon is impregnated with catalysis to increase adsorption capacity for specific VOCs
- AllerAir air quality experts create custom blends to deal with any VOC.

HEPA filtration

- HEPA filter traps 99.97% of particles as small as 0.3 microns.

Pre-filter

- Traps larger particles to prolong the life of your HEPA and Carbon filters.
- 2 anti-microbial filters suppress any microorganisms around the filter.
- Easy and rapid cleaning can be done in 30 seconds.

Robust all-metal housing

- Baked enamel housing avoids the release of vapors from plastics and ensures that no harmful gasses are released.
- 18 gauge steel.
- Cylindrical shape maximizes airflow.

3-speed fan

- 400 cubic feet per minute
- Turbo setting completely circulates the surrounding air.
- 10 year Guarantee.
- Can change air up to 12 times an hour in smaller rooms.
- Cleans up to 1500 square feet.
- Quiet motor is ideal for overnight use.
- Low electrical consumption (80 Watt average).

Options

- Over 40 different blends of impregnated carbon available.
- Positive and negative air attachments.
- Attachment for central air system.
- D and DX models available.

Eliminates VOCs often found in the home:

- | | |
|------------------|----------------------|
| - Formaldehyde | - Mold Toxins |
| - Ammonia | - Methylene chloride |
| - Sulfur dioxide | - Toluene |
| | - Tobacco smoke |

The 5000 VOCARB

18 lbs. of specially impregnated activated carbon, combined with true HEPA

15"



Shipping Weight: 50 lbs

Traps particles:

- Pollen
- Dust
- Dust mites
- Pet dander

Adsorb Chemicals, gasses and Odors:

- Airborne chemicals
- Mold toxins
- Paint fumes
- Cleaners
- Solvents
- Furniture glue
- Carpets
- Plastics
- Insulation materials
- Printer emissions
- Cigarette smoke

Invest in the health of your family with the AllerAir 5000 Vocab



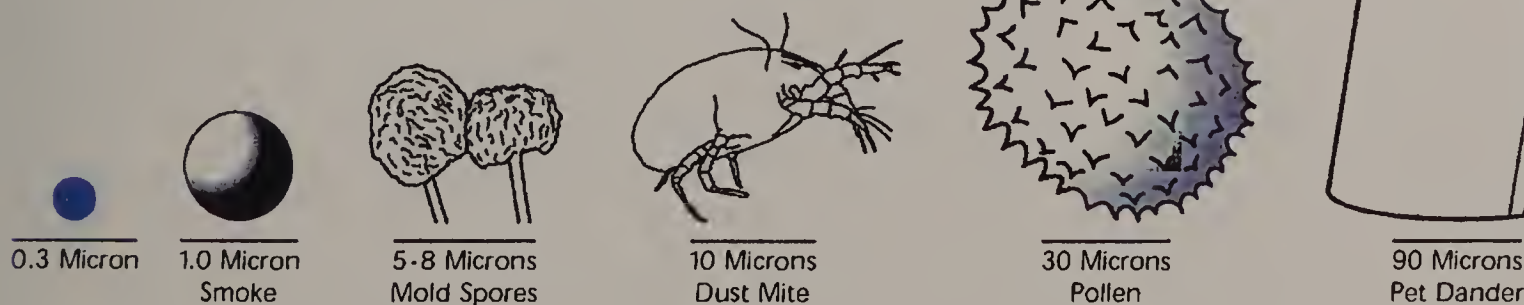
AllerAir Industries Inc. Toll free 1-888-852-8247 / Fax: 1-877-688-2193 www.allerair.com

High efficiency air filtration

How the AllerAir high efficiency air cleaning system works.

AllerAir air cleaners use a 4 phase filtering system. In the order that the air passes through them they are: the pre-filter, the mass activated carbon bed (MAC-B™) filter, the 2 anti-microbial filters and the HEPA filter.

- ❶ **The pre-filter** traps larger dust particles and is easily removed and cleaned with a vacuum cleaner. It acts to stop the larger particles such as dust and lint from clogging the other filters.
- ❷ **The mass activated carbon bed (MAC-B™) filter** adsorbs gases and odors. (Adsorb: no it's not a typo. This is the process by which activated carbon captures gases and odors.) Most off the shelf air cleaners have a few token ounces of carbon sprayed on the pre-filter. This is not sufficient to capture more than a small amount of the noxious gases and odors in the air and for only a short period of time. The MAC-B carbon filter has pounds of activated carbon (from 7 to 160 lbs.) that will trap 90% of gases and odors that pass over it and for many months before needing to be replaced.
- ❸ **The 2 anti-microbial filters** kill the airborne microbes that pass through them.
- ❹ **The HEPA filter** traps the airborne particles. These filters, which were developed by the Atomic Energy Commission to trap radio-active particles, can capture 99.97% of particles as small as 0.3 microns. That is as small as some bacteria.



Other filtering options for special cases.

- **Ultraviolet lamps** are available in some models to sterilize airborne micro-organisms such as bacteria, viruses and mold.
- **ULPA filters** are like HEPA filters but they can trap 99.999% of particles as small as 0.01 microns.

The importance of a metal casing to avoid plastic off gassing.

- **AllerAir air cleaners** are housed in a baked enamel metal casing. Unlike plastic, metal casings are completely inert and do not give off plastic vapors into the indoor air.

